Remarks:

Applicants appreciatively acknowledge the Examiner's confirmation of receipt of Applicants' claim for priority and certified priority document under 35 U.S.C. § 119(a)-(d).

Reconsideration of the application, as amended herein, is respectfully requested.

Claims 1 - 3, 5 - 13, 15 - 23 and 25 - 31 are presently pending in the application. Claims 3, 11, 13 and 23 have been amended. Claims 4, 14 and 24 were previously canceled. New claim 31 has been added.

On page 4 of the above-identified Office Action, claims 1 - 30 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U. S. Patent No. 6,388,997 to Scott ("SCOTT"), in view of U. S. Patent No. 7,035,232 to Suzuki ("SUZUKI"), further in view of U. S. Patent Application Publication No. 2002/0141478 to Ozluturk ("OZLUTURK"), and further in view of U. S. Patent No. 6,975,613 to Johansson ("JOHANSSON").

Applicants respectfully traverse the above rejections.

First, Applicants' claims 4, 14 and 24 were previously canceled from the present application, and thus, the rejections are moot as to those claims.

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Additionally, Applicants' claim 1 recites, among other limitations:

a transmitter of said base station being configured to transmit first data bursts to said mobile stations, at least some of the first data bursts containing at least two data blocks intended for different ones of said mobile stations, said transmitter being configured to produce identification information for said piconetwork only at a start of a transmission of each of the first data bursts; [emphasis added by Applicants]

Applicants' independent claim 31 recites similar limitations to those quoted from claim 1, among others

Further, Applicants' independent claim 11 recites, among other limitations:

first data bursts transmitted from the base station to the mobile stations, with at least some of said first data burst containing at least two data blocks, each of said data blocks being intended for different mobile stations, and further containing identification information for the piconetwork only at a start of each of said first data bursts; [emphasis added by Applicants]

Applicants' independent claim 21 recites similar limitations to those quoted from claim 11, among others. As such, all of Applicants' independent claims require, among other limitations, transmitting a first data burst containing at least two data blocks intended for different mobile stations, identification data being transmitted by the transmitter only

at a start of the transmission of each first data burst. The above-limitations of Applicants' claims, among others, are neither taught, nor suggested, by the art of record.

More particularly, none of the cited references teach or suggest, among other limitations of Applicants' claims, transmitting a first data burst containing at least two data blocks intended for different mobile stations, identification data being transmitted by the transmitter only at a start of the transmission of each first data burst. However, pages 4 - 5 of the Office Action allege that the above-discussed limitations of Applicants' claims are disclosed by the SCOTT reference. Applicants respectfully disagree.

Rather, page 4 of the Office Action equates Applicants' claimed "first data bursts" to the base station burst 571 of Fig. 5 of SCOTT and the "two data blocks" of Applicants' claims to the transmit time slots 574 of Fig. 5C of SCOTT, each of which, in the example of col. 20 of SCOTT, can carry 16 sub-messages 589 of Fig. 5C of SCOTT. Applicants respectfully disagree that the portions of SCOTT cited in the Office Action teach or suggest Applicants' particularly claimed "first data bursts" and/or Applicants' particularly claimed "two data blocks".

More particularly, col. 21 of SCOTT, lines 4 - 11, state:

In each transmit time slot 574, preceding the interleaved message 578 is a preamble 577. The preamble 577 assists the user station 302 in synchronization, and may comprise a spread spectrum code. Preambles 577 appear in each transmit time slot 574 and are dispersed throughout the transmission portion 574, therefore allowing the user station 302 to support channel sounding operations useful for setting up a rake receiver (e.g., synchronization) and/or selection diversity.

As such, as disclosed in col. 21 of SCOTT, each time slot 574 of SCOTT includes a preamble 577 ("preceding the interleaved message 578" and "dispersed throughout the transmission portion 574"), which contains identification information. As such, the base station burst 571 of SCOTT does not include identification information for the network/piconetwork "only at the start of a transmission" of each of the first data bursts, as required by Applicants' claims. Rather, SCOTT discloses that such preambles are "dispersed throughout the transmission portion 574".

The SUZUKI, OZLUTURK, and JOHANSSON references, cited in the Office Action in combination with SCOTT against Applicants' independent claims, do not cure the above-discussed deficiencies of the SCOTT reference. For the foregoing reasons, among others, the SCOTT, SUZUKI, OZLUTURK, and JOHANSSON references, taken alone or in combination, fail to teach or suggest all limitations of Applicants' independent

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claims and Applicants' claims 1 - 3, 5 - 13, 15 - 23 and 25 - 31 are believed to be patentable over those references.

Additionally, Applicants' independent claims 1, 11, 21 and 31 require, among other limitations, transmitting a group of second data bursts including identification information at a start of a transmission of the second data bursts, wherein the first data bursts and groups of the second data bursts are transmitted alternately.

The present Office Action equated that Applicants'
particularly claimed second data bursts to the mobile bursts
572 of Fig. 5C of SCOTT and the receive slot 575 of SCOTT to
Applicants' claimed data block intended for the base station.
The Office Action additionally alleged that SCOTT and SUZUKI,
taken in combination, allegedly disclosed Applicants' claimed
second data bursts including identification information for
the network/piconetwork at a start of a transmission of the
second data bursts. Applicants respectfully disagree.

More particularly, **SCOTT** discloses time division duplex communication system, while Fig. 5C is a timing diagram, illustrated from a base station perspective, showing a variation of the TDD/TDM/TDMA system of Fig. 5A, using an interleaved symbol transmission format. The Office Action

analogized a base station burst 571 of Fig. 5C of SCOTT, with the first data burst recited by Applicants' claims 1, 11 and 21. However, as discussed above, independent claims 1, 11, 21, and now new claim 31, require, among other limitations, that the identification information be produced only at the start of each of the first data bursts. In contrast to Applicants' claimed first data bursts, the base station burst 571 of SCOTT does not merely contain identification information only at its beginning, but also at the beginning of each time slot 574 contained therein.

Thus, the base station burst 571 of SCOTT cannot be the first data bursts (i.e., having identification information only at the start of each of the first data bursts) of Applicants' claims 1, 11, 21 and 31. Such a first data burst, as particularly required by Applicants' claims 1, 11, 21 and 31, is neither taught, nor suggested by SCOTT, nor by the other references cited in the Office Action. Thus, for the foregoing reasons, among others, the SCOTT, SUZUKI, OZLUTURK, and JOHANSSON references, taken alone or in combination, fail to teach or suggest all limitations of Applicants' independent claims.

Applicants note that Applicants' independent claims 1, 11, 21 and 31 require, among other limitations, at least two mobile

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stations. As such, in the system of **SCOTT**, more than only **one** time slot 574 must be included in the base station burst 571 of **SCOTT**, in order to analogize **SCOTT** to Applicants' claims.

Further, as stated above, the Office Action analogized the mobile bursts 572 of Fig. 5C of SCOTT with the second data bursts of Applicants' claims. However, Applicants' claims 1, 11, 21 and 31 require, among other limitations, second data bursts including identification information for the network/piconetwork at a start of a transmission of the second data bursts. "Identification information for the piconetwork" is described in the instant application, for example, on page 16, line 17 - page 17, line 3, which state:

Each of the data bursts that are shown in Fig.2 includes different groups of data and information. By way of example, in the Bluetooth Standard, identification information CAC (Channel Access Code) for the piconetwork is transmitted at the start of a data burst, followed by the actual data block that is to be transmitted, the header information H, payload data D and a checking bit pattern CRC (Cyclic Redundancy Check) for error identification and correction for the payload data D. [emphasis added by Applicants]

However, neither the SCOTT reference, nor the other referenced cited in the Office Action, teach or suggest, among other limitations, identification information for the network/piconetwork at a start of a transmission of the second data bursts. This failure in SCOTT is acknowledged on page 5

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of the Office Action, which states, in part:

However, Scott does not specifically disclose that the identification information is placed only at the start of the second data burst.

Rather, the Office Action goes on to point to the SUZUKI reference as allegedly disclosing the missing limitation of SCOTT, stating, in part:

In the same field of endeavor, Suzuki clearly shows in the second burst, the identification information is only placed at the start of the second data burst (fig. 3, column 3, lines 66-67, column 4, lines 1-8 (train-type data-burst structure)). [emphasis added by Applicants

Applicants respectfully <u>disagree</u> with the allegation of the Office Action that <u>SUZUKI</u> teaches or suggests identification information <u>for the network/piconetwork</u> at a start of a transmission of the second data bursts. More particularly, col. 3 of <u>SUZUKI</u>, line 66 - col. 4, line 8, state:

FIG. 3 shows the format of a data burst according to a first embodiment of a digital communication method of the present invention. For example, the data burst having a train-type data-burst structure includes a preamble (PR), data (DA) and one or a plurality of what will, hereinafter, be termed "mid-ambles" (MD). The preamble (PR) includes a synchronization code (SY), a unique word representing the start of received data, and a station-identification code (ID) showing which station the information is addressed to. The mid-amble (MD) includes a synchronization code (SY). [emphasis added by Applicants]

As such, as can be seen from the portion of SUZUKI cited in

the Office Action, the preamble (PR) of SUZUKI contains, among other things a station-identification code (ID) showing which station the information is addressed to.

However, a station-identification code (ID) identifying the station to which the information is addressed does not teach or suggest, among other things, identification information for the network/piconetwork. Rather, identification information of a receiving station is not the same as, nor does it teach or suggest, identification information for the network/piconetwork, as required by Applicants' independent claims. As stated above, the specification and claims of the instant application is very specific that the identification information contained only at the start of the second data burst is identification information for the piconetwork. See, for example, page 16 of the instant application, lines 18 - 21 ("By way of example, in the Bluetooth Standard, identification information CAC (Channel Access Code) for the piconetwork is transmitted at the start of a data burst . . . "). See also, for example, page 18 of the instant application, lines 19 -22, which state:

At the start of a data burst, identification information CAC for the piconetwork is transmitted (in the Bluetooth Standard this is called CAC, the so-called Channel Access Code, which is formed by a 72-bit long sequence). [emphasis added by Applicants]

This identification information is truly for the piconetwork and does not identify a receiving station for the data, as disclosed in SUZUKI. Rather, the instant application distinguishes information identifying the receiving station (i.e., the information of the preamble (PR) of SUZUKI) from the identification information of the present claims. In fact, the entirety of the paragraph on page 18 of the instant application, lines 10 - 22, states:

As in Fig. 2, the data blocks in the exemplary embodiment shown in Fig.3 contain header information H, payload data D and a checking bit pattern CRC. header information H for the data blocks "B -> Mi", i = 1, ..., 4, represents identification information for the respective mobile stations Mi and, in the Bluetooth Standard by way of example, includes a 3-bit address for the mobile station Mi. The header information H for the data blocks "Mi \rightarrow B", i = 1, ... ,4 is the identification information for the base station B, that is to say its address. At the start of a data burst, identification information CAC for the piconetwork is transmitted (in the Bluetooth Standard this is called CAC, the so-called Channel Access Code, which is formed by a 72-bit long sequence). [emphasis added by Applicants]

As such, the instant application clearly distinguishes the identification information for the respective mobile stations Mi (which is part of the header information H, in the instant application), from the identification information CAC for the piconetwork transmitted at the start of a data burst. Thus, although the preamble (PR) of Fig. 3 of SUZUKI includes an identification of the receiving station (i.e., identification information for a receiving station), it does not include

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identification information for the piconetwork/network, as required by Applicants' claims. The information included in the preamble (PR) of SUZUKI is clearly not the "identification information for a piconetwork" of Applicants' claims, as defined in the specification of the instant application.

As such, the SCOTT and SUZUKI references, taken in combination in the manner suggested in the Office Action, still do not teach or suggest all limitations of Applicants' claims. The OZLUTURK, and JOHANSSON references do not cure the above-discussed deficiencies of SCOTT and SUZUKI. Thus, for the foregoing reasons, among others, the SCOTT, SUZUKI, OZLUTURK, and JOHANSSON references, taken alone or in combination, fail to teach or suggest all limitations of Applicants' independent claims.

Further still, Applicants' note that even if the time slots 574 of SCOTT (i.e., the information contained therein) were analogized to Applicants' first data bursts of claims 1, 11, 21 and 31, and the time slots 575 of SCOTT were analogized with the second data bursts of claims 1, 11, 21 and 31, the SCOTT reference still does not disclose all limitations of Applicants' amended claims 1, 11 and 21. More particularly, SCOTT fails to teach or suggest, among other limitations of Applicants' claims 1, 11 and 21, that the first data bursts

(arguendo, the time slots 574 of SCOTT) are transmitted alternately with the groups of the second data bursts (arguendo, the time slots 575 of SCOTT), as required by amended claims 1, 11 and 21.

Rather, in contrast to the invention of Applicants' claims 1, 11 and 21, SCOTT discloses a group of first data bursts transmitted alternately with a group of second data bursts. Note that, if the system of SCOTT had only one base station and only one mobile station, it could be argued to disclose that the first data bursts and the groups of the second data bursts are transmitted alternately. However, Applicants' claims 1, 11 and 21 affirmatively recite that the claimed data transmission system includes at least two mobile stations. As such, the SCOTT reference fails to teach or suggest the above-limitations of Applicants' amended claims 1, 11 and 21. The SUZUKI, OZLUTURK, and JOHANSSON references, cited in the Office Action in combination with SCOTT, do not cure the above-discussed deficiencies of the SCOTT reference.

For the above reasons, among others, Applicants' claims 1, 11, 21 and 31 are believed to be patentable over the SCOTT, SUZUKI, OZLUTURK, and JOHANSSON references, taken alone or in combination.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of claims 1, 11, 21 and 31. Claims 1, 11, 21 and 31 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1, 11 or 21.

In view of the foregoing, reconsideration and allowance of claims 1-3, 5-13, 15-23 and 25-31 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made.

Please charge any fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,

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January 4, 2008

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